

REMARKS

The Office Action of July 7, 2011, and the references cited therein have been carefully considered.

In this Amendment, independent claim 17 has been amended to incorporate the limitation of claim 2, which has been cancelled. Additionally, claim 3 has been amended so that it now depends directly from claim 17, claim 4 has been cancelled since it is superfluous in view of the amendment to claim 1, and withdrawn claims 7-16 have been cancelled, without prejudice to claim same in a divisional application, in order to place the application in condition for allowance.

The Examiner, Ms. Amanda Barrow, is thanked for the courteous telephone interview afforded undersigned counsel on November 7, 2011, during which the differences between the present invention as defined in claims 17 and 2 and the applied prior art references were discussed. With regard to independent claim 17, it was again pointed out that in view of the manner in which the closed end of the Yamashita reference was formed, wrinkles and non-uniform thickness of the closed end would result as was pointed out in the introductory portion of the present invention, wherein the Yamashita reference is cited and discussed. Moreover, the scale of schematic Fig. 5D of Yamashita was so small that wrinkles, particularly on the inner surface of the separator bottom, would not be shown or visible. In particular, it was pointed out that as a result of the manner in which the semi-spherical shape of the bottom was formed by the semi-spherical cavity of the heat curl mold (29) shown in Fig. 6C, a semi-spherical outer surface would clearly result. However, one has to consider what happens to the open separator end which is folded as shown in Fig. 6C and 7 when simply pressed in a vertical direction against the mold (29).

Since there is no relative rotation between the mold and the separator bottom when the separator bottom is pressed vertically against the mold (29), the separator end or bottom, which has an obliquely deformed or folded configuration must be further deformed and folded under the effect of the applied pressure. With this arrangement it is inevitable that during these pressure and molding steps wrinkles are formed. Moreover, at certain places there will be twofold, threefold or more-fold layers of the separator wall material, which already consists

of at least three wound layers of material. If the resulting total wall thickness of the separator bottom is expressed in multiples of the sheet material thickness, then the resulting thickness of the separator bottom varies between three (a simple wall thickness) up to at least nine or even twelve times the wall material thickness where multiple layers are pressed on each other. This results in a largely uneven thickness of the separator end or bottom, which cannot be seen from the outside, but takes up a substantial volume on the inside of the separator and is undesirable. The interior surface of the separator end or bottom will have a largely uneven wrinkled and bent surface and the bottom itself will not have a substantially uniform thickness, all as required by independent claim 17. Moreover, it was pointed out that while there might be a slight unevenness in the separator bottom thickness in the separator according to the invention as a result of the last turn of material not being a perfect full turn, this results in a thickness difference of only the thickness of a single sheet of material., so that the thickness is still substantially uniform. This is in contrast to the Yamashita device wherein the thickness variation is at least nine or more times the sheet material thickness, which cannot be considered to be substantially uniform.

At the conclusion of the discussion of claim 17, the Examiner indicated that while she understood Applicant's position, in the absence of any evidence to support the arguments, she was maintaining her current position concerning the rejection.

With regard to claims 2 and 4, which recite that there is no binder between the turns of the wound sheets of material forming the separator cylinder, it was pointed out that while there admittedly was prior art teaching the problems resulting from the use of a binder and that it was possible to form a separator without use of a binder, the Yamashita reference specifically taught the use of a binder in order to form his improved separator. Thus to form the separator of Yamashita without a binder would be contrary to the teachings of Yamashita. The Examiner indicated that she agreed with this position and would withdraw the rejection of claims 2 and 4 based on the Yamashita reference and conduct a further search regarding this issue. It was further agreed that claim 2 would be incorporated into claim 17 to advance the prosecution of the application.

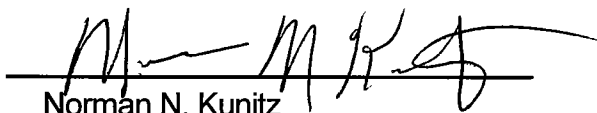
In view of the above discussions and agreements at the interview, it is submitted that claim 17, and claims 3, 5 and 18 dependent thereon, i.e., all of the pending claims, are allowable over the references and rejections of record and are in condition for allowance. Such action and the passing of this application to issue are therefore respectfully requested.

If the Examiner is of the opinion that the prosecution of this application would be advanced by a further personal interview, the Examiner is invited to telephone undersigned counsel to arrange for such an interview.

Respectfully submitted,

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